



6

SEQUENCE LISTING

<110> Schellvenz, Volker

<120> Targeted Enzyme Prodrug Therapy

<130> GC714

A
<140> US 10/022,097
<141> 2001-12-13

<150> US 60/279,609
<151> 2001-03-28

<150> US 60/255,774
<151> 2000-12-14

<160> 43

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Thr Pro Leu Met Lys Ala Gln Ser Val Pro Gly Met Ala Val Ala Val
20 25 30
Ile Tyr Gln Gly Lys Pro His Tyr Tyr Thr Phe Gly Lys Ala Asp Ile
35 40 45
Ala Ala Asn Lys Pro Val Thr Pro Gln Thr Leu Phe Glu Leu Gly Ser
50 55 60
Ile Ser Lys Thr Phe Thr Gly Val Leu Gly Gly Asp Ala Ile Ala Arg
65 70 75 80
Gly Glu Ile Ser Leu Asp Asp Ala Val Thr Arg Tyr Trp Pro Gln Leu
85 90 95
Thr Gly Lys Gln Trp Gln Gly Ile Arg Met Leu Asp Leu Ala Thr Tyr
100 105 110
Thr Ala Gly Gly Leu Pro Leu Gln Val Pro Asp Glu Val Thr Asp Asn
115 120 125
Ala Ser Leu Leu Arg Phe Tyr Gln Asn Trp Gln Pro Gln Trp Lys Pro
130 135 140
Gly Thr Thr Arg Leu Tyr Ala Asn Ala Ser Ile Leu Gly Phe Gly Ala
145 150 155 160
Leu Ala Val Lys Pro Ser Gly Met Pro Tyr Glu Gln Ala Met Thr Thr
165 170 175
Arg Val Leu Lys Pro Leu Lys Leu Asp His Thr Trp Ile Asn Val Pro
180 185 190
Lys Ala Glu Glu Ala His Tyr Ala Trp Gly Tyr Arg Asp Gly Lys Ala
195 200 205
Val Arg Val Ser Pro Gly Met Leu Asp Ala Gln Ala Tyr Gly Val Lys
210 215 220

Thr Asn Val Gln Asp Met Ala Asn Trp Val Met Ala Asn Met Ala Pro
225 230 235 240
Glu Asn Val Ala Asp Ala Ser Leu Lys Gln Gly Ile Ala Leu Ala Gln
245 250 255
Ser Arg Tyr Trp Arg Ile Gly Ser Met Tyr Gln Gly Leu Gly Trp Glu
260 265 270
Met Leu Asn Trp Pro Val Glu Ala Asn Thr Val Val Glu Gly Ser Asp
275 280 285
Ser Lys Val Ala Leu Ala Pro Leu Pro Val Ala Glu Val Asn Pro Pro
290 295 300
Ala Pro Pro Val Lys Ala Ser Trp Val His Lys Thr Gly Ser Thr Gly
305 310 315 320
Gly Phe Gly Ser Tyr Val Ala Phe Ile Pro Glu Lys Gln Ile Gly Ile
325 330 335
Val Met Leu Ala Asn Thr Ser Tyr Pro Asn Pro Ala Arg Val Glu Ala
340 345 350
Ala Tyr His Ile Leu Glu Ala Leu Gln
355 360

<210> 2

<211> 8

<212> PRT

<213> Enterobacter cloacae

<400> 2

Arg Leu Tyr Ala Asn Ala Ser Ile
1 5

<210> 3

<211> 8

<212> PRT

<213> Enterobacter cloacae

<400> 3

Val His Lys Thr Gly Ser Thr Gly
1 5

<210> 4

<211> 50

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<213> Artificial Sequence

<220>

<223> primer

<400> 4

gggccccggac atccaaagct tgtcgacagg aagcggaaca cgttagaaagc 50

<210> 5

<211> 50

<212> DNA

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<223> primer

<400> 5

aagctttgga tgcggggcc cgaattcgtg taaaattgtt atccgctcac	50
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actattacac atttggcaag gccgacat	88
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snnataaata acggccaccc ccatgcct	88
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ctaggcttc tactagttt attgtcttag tcgtagctcc atctgcagtt gaagactctc	60
tactggcggg tttg	74
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gggtccataaa aactggc	77	
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<220>
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hcsngdhcsn gdhctcctgg gtccataaaa ctggc                                95

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<213> Artificial Sequence

<220>
<223> primer

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attcacttct gccacgggca acggcgca                                         28

<210> 15
<211> 25
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<220>
<223> primer

<400> 15
tagagccagt tttatggacc cagga                                              25

<210> 16
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<220>
<223> primer

<400> 16
tggcccgccg ccgcttaattg tcttaggcgg atgccatgtg cagtaactaga agacggcgta      60
tcgggtcaat gtatcagggt ctcg                                84

<210> 17
<211> 26
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<220>
<223> primer

<400> 17
agacaattag cggccgcggg ccatgt                                              26

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<210> 18		
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cagccgagac cctgatacat tgaccgca		
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<211> 68		
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gctactgg		
60		
68		
<210> 20		
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<400> 20		
tacgccagta gcgcgactgc gccagcgcga tgccctgctt aagsnnns nnsnnnnsn		
nctccggggc catgt		
60		
75		
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<211> 80		
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tggcgcgatc	gctactgg	80
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gccagcgca		tgccctgctt
aagsnnsnns		nnsnnnsnnsn
nnsnnnsnn		snnctccggg
snnctccggg		gccatgt
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87		
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gtttaattgt		cttaggcgga
tgccatgtgc		tcgtagctcc
atctgcagtt		gaagac
60		
76		
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gttattttatn		nsnnnsnnnn
snnsnnsnn		nnsaaaccgc
actattacac		atttgcaag
atttgcaag		gccgacat
60		
88		
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<220>		
<223> synthetic oligonucleotide		
<400> 25		
ctaggtcttc		tactagttta
attgtcttag		tcgtagctcc
atctgcagtt		gaagactctc
tactggcggg		tttg
60		
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<210> 26
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<220>
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<221> misc_feature
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 nnnnsnnnn snnstccctgg gtccataaaa ctggc 60
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 <212> DNA
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<220>
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<400> 27
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<210> 28
 <211> 25
 <212> DNA
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<220>
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<400> 28
 tagagccagt tttatggacc cagga 25

<210> 29
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 <213> Artificial Sequence

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<221> VARIANT
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 1 5 10 15
 Pro Pro Val Lys Ala Ser Trp Val His Lys Thr Gly Ser Thr Gly Gly
 20 25 30
 Phe Gly Ser Xaa

<210> 30
<211> 42
<212> PRT
<213> Artificial Sequence

<220>
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<221> VARIANT
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<223> Xaa = Any Amino Acid

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1 5 10 15
Arg Arg Leu Asp Ala Ser Leu Cys Phe Val Lys Ser Trp Val His Lys
20 25 30
Thr Gly Ser Thr Gly Gly Phe Gly Ser Xaa
35 40

<210> 31
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<212> PRT
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1 5 10 15
Glu Glu Glu Ala Gly Thr Ser Lys Val Gly Pro Ser Trp Val His Lys
20 25 30
Thr Gly Ser Thr Gly Gly Phe Gly Ser Xaa
35 40

<210> 32
<211> 42
<212> PRT
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<220>
<223> synthetic library sequence

<221> VARIANT
<222> (1)...(42)
<223> Xaa = Any Amino Acid

<400> 32
Lys Val Ala Leu Ala Pro Leu Pro Val Ala Glu Val Asn Gln Gly Thr
1 5 10 15

Glu Leu Arg Phe Lys Leu Lys Leu Lys Arg Glu Ser Trp Val His Lys
20 25 30
Thr Gly Ser Thr Gly Gly Phe Gly Ser Xaa
35 40

<210> 33
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<221> VARIANT
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<223> Xaa = Any Amino Acid

<400> 33
Lys Val Ala Leu Ala Pro Leu Pro Val Ala Glu Val Asn Arg Gly Leu
1 5 10 15
Pro Thr Trp Thr Ala Leu Val Glu Lys Pro Gly Ser Trp Val His Lys
20 25 30
Thr Gly Ser Thr Gly Gly Phe Gly Ser Xaa
35 40

<210> 34
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<221> VARIANT
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1 5 10 15
Val Asp Leu Gly Pro Ser Ser Arg Ser Arg Arg Ser Trp Val His Lys
20 25 30
Thr Gly Ser Thr Gly Gly Phe Gly Ser Xaa
35 40

<210> 35
<211> 42
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<221> VARIANT
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<223> Xaa = Any Amino Acid

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1 5 10 15
Thr Thr Ser Asp Glu Val Val Gly Thr Gln Lys Ser Trp Val His Lys
20 25 30
Thr Gly Ser Thr Gly Gly Phe Gly Ser Xaa
35 40

<210> 36

<211> 42

<212> PRT

<213> Artificial Sequence

<220>

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<221> VARIANT

<222> (1)...(42)

<223> Xaa = Any Amino Acid

<400> 36

Lys Val Ala Leu Ala Pro Leu Pro Val Ala Glu Val Asn Tyr Thr Ser
1 5 10 15
Val Gly Ala Gly Trp Arg Ala Gln Ala Val Gly Ser Trp Val His Lys
20 25 30
Thr Gly Ser Thr Gly Gly Phe Gly Ser Xaa
35 40

<210> 37

<211> 42

<212> PRT

<213> Artificial Sequence

<220>

<223> synthetic library sequence

<221> VARIANT

<222> (1)...(42)

<223> Xaa = Any Amino Acid

<400> 37

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1 5 10 15
Val Val Pro Ser Tyr Leu Val Arg His Asp Ser Ser Trp Val His Lys
20 25 30
Thr Gly Ser Thr Gly Gly Phe Gly Ser Xaa
35 40

<210> 38

<211> 42

<212> PRT

<213> Artificial Sequence

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<221> VARIANT

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<223> Xaa = Any Amino Acid

<400> 38

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Asn Thr Ser Thr Ile Met Pro Arg Ser Pro His Ser Trp Val His Lys
20 25 30
Thr Gly Ser Thr Gly Gly Phe Gly Ser Xaa
35 40

<210> 39

<211> 42

<212> PRT

<213> Artificial Sequence

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<222> (1)...(42)

<223> Xaa = Any Amino Acid

<400> 39

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Lys Asp Gly Trp Pro Arg Gln Gly Lys Glu Gly Ser Trp Val His Lys
20 25 30
Thr Gly Ser Thr Gly Gly Phe Gly Ser Xaa
35 40

<210> 40

<211> 14

<212> PRT

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<223> loop library sequence

<221> VARIANT

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<210> 41

<211> 95

<212> DNA

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<221> misc_feature

<222> (1)...(95)

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hcsngdhcsn gdhctcctgg gtccataaaa ctggc 95

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<211> 28

<212> DNA

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A

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<223> synthetic oligonucleotide

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28

<210> 43

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> synthetic oligonucleotide

<400> 43

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25